

## Claims

What is claimed is:

- [c1] A method of addressing an entry in a directory server, comprising:  
generating a unique identifier for the entry;  
creating an encoded address by encoding the unique identifier into a distinguished name; and  
specifying the entry using the encoded address for a plurality of operations.
- [c2] The method of claim 1, wherein the unique identifier comprises a multi-bit number having a first octet set to an identifier type and a plurality of remaining bits set to an identifier.
- [c3] The method of claim 1, wherein the unique identifier comprises a multi-bit number having a first octet set to zero and a plurality of remaining octets set to an identifier generated in accordance with a unique identifier specification.
- [c4] The method of claim 1, wherein generating the unique identifier is time-based comprising a single-threaded generation algorithm and a multi-threaded generation algorithm.
- [c5] The method of claim 4, wherein the multi-threaded generation comprises an update task and a generator task.
- [c6] The method of claim 1, wherein generating the unique identifier is name-based.
- [c7] The method of claim 1, wherein generating the unique identifier is random-based.

- [c8] A method of addressing an entry in a directory server, comprising:  
generating a unique identifier for the entry;  
creating an encoded address by encoding the unique identifier into a control; and  
specifying the entry using the encoded address for a plurality of operations.
- [c9] The method of claim 8, wherein the unique identifier comprises a multi-bit number having a first octet set to an identifier type and a plurality of remaining bits set to an identifier.
- [c10] The method of claim 8, wherein the unique identifier comprises a multi-bit number having a first octet set to zero and a plurality of remaining octets set to an identifier generated in accordance with a unique identifier specification.
- [c11] The method of claim 8, wherein generating the unique identifier is time-based comprising a single-threaded generation algorithm and a multi-threaded generation algorithm.
- [c12] The method of claim 11, wherein the multi-threaded generation comprises an update task and a generator task.
- [c13] The method of claim 8, wherein generating the unique identifier is name-based.
- [c14] The method of claim 8, wherein generating the unique identifier is random-based.
- [c15] A unique identifier-based addressing system for a directory server, comprising:  
a unique identifier generated for an entry; and  
an encoded address created by encoding the unique identifier into a distinguished name;  
wherein the entry is specified using the encoded address for a plurality of operations.

- [c16] The system of claim 15, wherein the unique identifier comprises a multi-bit number having a first octet set to an identifier type and a plurality of remaining bits set to an identifier.
- [c17] The system of claim 15, wherein the unique identifier comprises a multi-bit number having a first octet set to zero and a plurality of remaining octets set to an identifier generated in accordance with a unique identifier specification.
- [c18] A unique identifier-based addressing system for a directory server, comprising:  
a unique identifier generated for an entry; and  
an encoded address created by encoding the unique identifier into a control;  
wherein the entry is specified using the encoded address for a plurality of operations.
- [c19] The system of claim 18, wherein the unique identifier comprises a multi-bit number having a first octet set to an identifier type and a plurality of remaining bits set to an identifier.
- [c20] The system of claim 18, wherein the unique identifier comprises a multi-bit number having a first octet set to zero and a plurality of remaining octets set to an identifier generated in accordance with a unique identifier specification.
- [c21] A unique identifier-based addressing system for a directory server, comprising:  
means for generating a unique identifier for an entry;  
means for creating an encoded address by encoding the unique identifier with a control; and  
means for specifying the entry using the encoded address for a plurality of operations.

- [c22] A unique identifier-based addressing system for a directory server, comprising:
- means for generating a unique identifier for an entry;
  - means for creating an encoded address by encoding the unique identifier into a distinguished name; and
  - means for specifying the entry using the encoded address for a plurality of operations.